Society Reports.

NEW YORK NEUROLOGICAL SOCIETY.

Meeting held December 6th, 1887.

THE PRESIDENT, DR. C. L. DANA, IN THE CHAIR.

DR. WAITZFELDER presented a case of

PROFESSIONAL CRAMP.

The patient was a man 38 years of age, and had been a cigarmaker for twenty years. He was first seen by the speaker six months ago. Six months before this he had commenced to notice a stiffness and awkwardness in forming the head of the cigar. This required a rotary motion of the thumb and index finger. At first he was able to substitute his middle finger in the manœuvre, but later the stiffness extended to this and finally to the little finger. When first seen there was some anæsthesia of the skin and tonic spasm of the flexors of the fingers. These contractures were partially relieved by rest, although they never entirely disappeared. They were aggravated by any effort to work at his trade, and by changes in temperature either to heat or cold. Exhibition causes relaxation of the spasm, while associated movements increase it. A short time ago the patient had tried varnishing, work which requires only coarse motions of the hand, but was obliged to give it up. The patient had been under treatment for six months with galvanism, faradism, strychnine, etc., without improvement. Regarding the lesion as central, the speaker suggested stretching the radial nerve, with the object of inducing atrophy in the central cells, which might be considered the source of irritation. As Dr. Seguin had seen the case, his opinion was requested.

Dr. Seguin saw nothing which would distinguish the case from one of aggravated professional spasm. He regarded such dyskineses of central origin, and would favor nerve stretching. His experience had, in fact, been discouraging in any treatment for professional cramp. A case of waiter's cramp had come under his observation. He mentioned it because rare. The man had been a waiter for fourteen years, carrying plates in the manner of his class, until reaching a stage when he broke dishes and spilled their contents over the guests.

Dr. E. C. Seguin read a paper upon

THREE CASES OF HEMIANOPSIA,

of peripheral or neural origin, with a study of the symptom hemiopic pupillary inaction, its diagnostic value, etc.

All of the cases were supposed to have a neural peripheral lesion. All presented the pupillary reaction hinted at by Wm. Graefe, and described by Wernicke as the hemiopic pupillary reaction, a symptom never yet observed or described in this country.

Case I. was first seen October 26th, 1887, referred from the Eye Department of the Manhattan Hospital by Dr. Webster. Six years previously the patient had commenced to suffer from headache, mostly frontal, also nausea and vomiting. Two years previously he had suffered from more or less constant pain. For the last few months the headache had been less, but he had lost vision in the left eye. No history of syphilis was obtained. On examination, the right visual field showed temporal hemianopsia outside the point of fixation. The visual field of the left eye was completely blind. Vision was at this time, R. E. $\frac{20}{200}$, L. E. o. Light thrown into the left eye caused no reaction in either pupil. If thrown into the right eye in the optical axis, good reaction in both pupils occurred. If the light was moved nasalward, reaction was obtained in both pupils, also if moved temporalward within an angle of sixty degrees. If thrown further toward the temporal or blind side, no reaction in either pupil occurred. The centripetal portion of the arc controlling pupillary reaction was complete only in the right eye, while the centrifugal portions were perfect in both eyes.

Nov. 21st the same reactions were obtained. If light were thrown at an angle of ninety degrees, from the nasal side at any angle, or from the temporal side up to an angle of seventy or sixty degrees, reaction occurred in both pupils ; but if the light entered the eye from the temporal side at an angle of sixty to forty degrees from the horizontal, no reaction was obtained. Vision was now found as follows : L. E. 0, R. E. $\frac{60}{100}$, showing progressive loss during the month.

The lesion in this case is probably one of the chiasm, destroying both fasciculi in the left eye, and the fasciculus cruciatus for the right eye.

Case II. was one of typical temporal hemianopsia, with darkness also of the lower nasal quadrant upon the left side. The patient, 41 years of age, was referred to the author by Dr. David Webster.

In 1886 the patient had noticed occasional headaches, with increasing failure of the left eye. There was diplopia at that time. If two objects were present, the patient saw three ; if four, five, etc. Light attacks of vertigo were complained of. There was no history of syphilis in the case. The patient was first seen by the author, Nov. 11th. The right eye showed the vertical line of separation passing through the point of fixation. This was the first case in the author's experience of either central or peripheral origin of which this had been true. There was right hemiopic pupillary inaction. If light were thrown from the temporal side at an angle more oblique than sixty degrees, no reaction occurred. If thrown from the nasal side or directly into the eye, reaction of both pupils was obtained. In the left eye, slight reaction occurred only to central illumination. Vision, R. E. $\frac{8}{200}$, L. E. $\frac{20}{50}$. The latter was an interesting finding, as the left eye, with the better vision, had a smaller field than the right eye, showing that the vision is not measured by the geometrical extent of the field, but rather by the general state of nutrition of the optic nerve.

The lesion in this case involved both fasciculi cruciati and the ventral or inferior half of the fasciculus lateralis of the left eye. A test made Dec. 16th showed that color perception was normal in the preserved half and quarter fields of vision.

Case III. was 25 years of age, also referred to the author by Dr. Webster from the Manhattan Eye Department. The case was first seen Oct. 10th, 1887. The patient had commenced to suffer from loss of vision two years previously. At the date of examination the right eye was completely blind. There was general loss of strength, but no ætiology of injury, and no history of syphilis. There was no paralysis, no loss of equilibrium. The dynamometer showed twenty-three degrees in the right hand, twenty in the left. At a subsequent examination, the left eye showed typical temporal hemianopsia. Left vision was good; can read No. 1 Jaeger at seven inches. The right eye gave a peculiar field, viz., all dark except two sectors in upper quadrants, separated by a dark median strip. The lesion in this case involves the fasciculus cruciatus for the left eye, and, irregularly, both fasciculi for the right eye.

The author then referred especially to the symptom common to the three cases, called by Wernicke hemiopic pupillary reaction, but which he would designate as hemiopic pupillary inaction; and its diagnostic value in hemianopsia of central or peripheral origin. The optic arc consists of the retina, especially the macula, the optic nerves and tracts for its peripheral portion, the anterior group of the corpora quadrigemina with the nuclei of the motor oculi nerves as centers, the motor oculi, the ciliary nerves, and the iris for its centrifugal portion. Contraction of the whole iris follows stimulation, because the termination of the ciliary nerves is plexiform in arrangement. The path may be broken by lesion of the centripetal portion, by lesion of the reflex center (or optic lobes), or by lesion of the centrifugal paths. The termination of this—the iris—may be immobile from iritis. In the cases reported, the symptom was observed with temporal hemianopsia. If a pencil of light were directed in the optic axis, or moved nasalward so as to strike upon the temporal or normal half of the retina, good reaction was obtained; also if moved temporalward up to an obliquity of sixty or seventy degrees; but if it entered at an angle of forty to sixty degrees from the horizontal, no reaction was obtained. The light experiment was not exact, because it is impossible to focus exactly the pencil of light. By focusing nearly in the optical axis, crossing of the rays and diffusion upon the temporal or sensitive portion of the retina occurs. Without this diffusion, inaction of the pupil would be noted as soon as the rays of light struck the nasal side of the field, and the experiment would be as exact as the perimetric test.

In making the examination, the patient should be in a dark room, with the gasjet or lamp behind him in the usual position for ophthalmic examination. The patient should be directed to look toward the farther side of the room, and a faint light from a plane or large concave mirror held out of focus thrown into the eye. Relaxation of the iris is thus obtained. A beam focused by an ophthalmological mirror is then thrown into the pupil from the optic center and from various angles nasalward and temporalward, and reactions noted. It is especially important that the patient should look at a distant object; the same was true for pupillary examination in tabes, etc.

The author then added a number of rules for determining the location of the lesion in hemianopsia.[*]

DR. GRAEME HAMMOND then presented

A CASE OF BITEMPORAL HEMIANOPSIA

for Dr. C. H. Brown.

The patient was a woman, 37 years of age. Aug. 10th, 1887, was suddenly seized with pain in the right eye, the sight of which was lost. The pain spread to the left eye, and in three minutes she was totally blind. The pain continued spreading over the head to the base of the skull. The patient was in bed six weeks. Nov. 15th she commenced to walk a little, and under the iodide treatment, vision returned, so that she could see an object if within two feet of the eye. She can now read newspaper headings, but effort to do more than this gives pain. Examination showed obscuration of the nasal half of the field covering the point of fixation in both eyes.

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[*] For the complete paper with diagnosis, *vide*, JOURNAL OF NERVOUS AND MENTAL DISEASES, Dec. 188 .

Dr. Dana had seen the fields drawn by Dr. Francis Valk, and the obscuration was very marked.

Dr. Seguin was able to give a satisfactory demonstration of hemiopic pupillary inaction in this patient.

Dr. Brill proposed three divisions for cases of hemianopsia; namely, into those of prosencephalic, mesencephalic and peripheral origin. Where the pupillary reaction was retained the two latter would be thrown out and the lesion would pertain to the cortex or subcortical expanse.

Dr. Starr suggested that the Society owed its thanks to Dr. Seguin for a series of three papers upon so interesting a subject. To make accurate diagnosis possible by the working out of a single symptom was an enviable result. The symptom had been known and its lesion tabulated, especially by Wernicke in his Gehirnkrankheiten, but not before in the English tongue. The symptom has to be searched for carefully. Unless the physician uses the correct method, it will not be found. In many published cases it was undoubtedly present, but was not discovered. The speaker referred to the fact that Ferrier, in Brain, Vol. VI., makes the escape of the macula a diagnostic point, stating that where the lesion is located in the chiasm and tract, central vision is impaired; that where it is located in the cortex or between the thalamus and the cortex central vision is not impaired. He had formed his new diagram in the second edition of his Functions of the Brain upon this theory, according to which central vision should have been impaired in all of the reported cases.

The speaker did not agree with Dr. Brill as to the practicability of classification according to the fœtal development of the brain. The optic nerve is derived from the thalamencephalon and the retina from the mesencephalon; thus two portions of the neural tube are concerned in the peripheral apparatus.

Dr. Leszynsky had had the pleasure of examining two of the cases referred to in Dr. Seguin's paper. The examination was not difficult, though it required care. He considered the head mirror of assistance in the manœuvre. The term inaction of the pupil he thought misleading.

Dr. Birdsall thought the classification of Dr. Seguin practicable and likely to be of service.

Dr. Brill referred to the fact that von Gudden had obtained reaction of the pupil by the use of intense sunlight after division of the optic nerve, showing ganglionic elements in the iris itself, which are able to function independently.

Dr. Seguin closed the discussion. He found clinical records opposed to Ferrier's classification, as the dividing line hardly ever passes through the point of fixation in any form of hemianopsia, and he failed to find light on the escape of the macula by any theory of decussation. He was rather inclined to think it dependent upon the structure of the macula which was somewhat ganglionic in character and markedly different from that of the remainder of the retina. Before von Gudden, Brown Sequard had demonstrated the existence of a local mechanism for iris contraction in lower animals, but there was no evidence that such a mechanism was active in the human eye.

Dr. Noyes then presented specimens of

COMPOSITE PORTRAITURE IN THE INSANE.

A composite, taken from eight general paretics, was exhibited. This showed in a marked degree the washing out of the lines of the face. Incidentally, Dr. Noyes also exhibited the college composites recently published.

Dr. Seguin suggested that the Vassar composite had a more womanly character than that of the Harvard Annex.

Dr. Birdsall agreed in this opinion. The Harvard composite figured an intellectual rather than a womanly being.

The meeting adjourned.

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THE PHILADELPHIA NEUROLOGICAL SOCIETY.

A regular meeting of the Philadelphia Neurological Society was held November 28th, 1887, Vice-President Dr. Charles K. Mills in the chair.

Dr. J. C. Wright read a note on

ANTIPYRIN AS AN ANALGESIC (see p. 40).

DISCUSSION.

Dr. William Osler.—I have used antipyrin in a few cases at the Infirmary for Nervous Diseases, and I regret to say that, on the whole,